Title (en)

STAR TRACKER DEVICE HAVING AN ACTIVE PIXEL SENSOR

Title (de)

STERNENVERFOLGUNGSEINRICHTUNG MIT EINEM AKTIVEN PIXELSENSOR

Title (fr)

DISPOSITIF SUIVEUR STELLAIRE AYANT UN CAPTEUR À PIXELS ACTIFS

Publication

EP 2241102 A1 20101020 (EN)

Application

EP 08701042 A 20080109

Priority

EP 2008000109 W 20080109

Abstract (en)

[origin: WO2009086849A1] The invention relates to an active-pixel-sensor (APS) apparatus for use in a star tracker device including an imager chip (10), said imager chip (10) comprising an array (13) of photo-diodes operating as optical pixels, and a logic circuit (14). The logic circuit is configured for reading out a pixel signal depending on an amount of light irradiated during a predetermined integration time (T) and resetting the optical pixel upon termination of the predetermined integration time (T) processing the pixel signals and to output the modified signals and for performing a non-destructive readout of the pixel signal during the integration time (T). In order to distinguish Single-Event-Upset (SEU) contributions to the signal from star signal contributions, it is proposed to further configure the logic circuit (14) to detect whether or not a discontinuity has occurred in the pixel signal during the integration time, and to modify the signal depending on the result of this detection.

IPC 8 full level

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CPC (source: EP KR US)

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